

Makin' Bacon

Introduction

Bacon is made from fresh pork which has been cured (preserved with salt) so that it will keep for longer. There are two main methods of curing:

Dry Curing

This is the oldest method and each farmhouse would have its own recipe and a slab of bacon would be kept in the inglenook above the fireplace. From Saxon times pigs were fattened in oak forests on mast (acorns) during Autumn and cured to provide meat for the family in winter months. Bacon formed part of the rations for long distance sea journeys, heavy salting preserved the meat from spoiling, but by the time it reached the Americas it was tough and more like boot leather than bacon as we know it today.

Wet Curing

The term 'Wet-cure' means to immerse in a liquid brine (a salt and saltpetre solution containing useful salt tolerant bacteria) for 3 to 4 days. This is a much milder form of curing, and the meat is cured in the brine under refrigeration. As meat keeps fresh longer at lower temperatures it does not require so much salt. The Wiltshire Cure (Wet-cure) was developed by the Harris family of Calne, Wiltshire in the United Kingdom, and was revolutionary in its time (1840's). As there were no refrigerators in those days, they used to pack the roof with winter ice to lower the temperature

Unfortunately 'mass produced' bacon today is not only immersed in liquid but pumped with water and phosphates to speed up the process and add yield. The more supermarkets squeezed their vendors on price, the more water has been added. True flavour has been sacrificed for profit.

For the purposes of this article, we will describe the wet-cure process.

Ingredients

Making your own bacon at home is not difficult. You will need pork belly and a brine of some sort. The most important ingredients are salt and TIME.

Pork Belly

Use the belly meat from the back of the belly (closest to the loin). This is the meatiest part of the belly as opposed to the meat that comes off the front of the belly, which is a little skimpy as it has to be pulled off of the ribs.

Begin with fresh bellies that have been chilled to about 42 degrees F within 24 to 30 hours after slaughter. If the fresh bellies are purchased from a commercial source, they will have been properly chilled. If the source is farm slaughter, take

care to chill them rapidly. Do not stack warm bellies during the chilling process, and begin curing within 48 hours after slaughter.

Trim the bellies to the desired shape. This is typically square or rectangular, and will enable you to cut uniform slices of bacon from the belly once it has been cured and smoked.

Brine (Wet-cure)

A brine has 2 main ingredients: Salt and Sugar. Salt is the primary ingredient, with sugar added to offset some of the salt's harshness, and to keep the meat more moist and soft during aging. One of the reasons that bacon keeps so long is that it's been both brined and smoked. The salt in the brine is used to pull moisture out of the meat. The less moisture that's in the meat, the more inhospitable it is to bacteria, that cause spoilage. Brining also prepares the meat for smoking, which has preservative powers of its own. Smoke also brings a lot of flavor, aroma, and color to your bacon. Nitrates and nitrites are often included as anti-bacterial agents as they are particularly effective against the deadly botulism organism. They also ensure a nice pink color on the meat.

Whereas there are many brine recipes out there, there are also several commercially prepared brines available for purchase. These brines have your basic salt and sugar and some have added spices and flavoring to give a characteristic flavor, aroma or appearance.

We use a Maple cure, that is available from 'The SausageMaker' (www.sausagemaker.com). We do not follow the instructions that come with this cure, but rather use 10 ounces of cure to 2 gallons of water. Make enough brine to fill a non-reactive container that allows you to completely submerge your pork bellies. (2 Gallons of brine is about right for 2 x 3-pound pork bellies)

Trimming Curing

Curing

Place the container with the submerged pork bellies (use plates to weigh down the bellies if they float to the top of the water) in the refrigerator for 4 days. Overhaul the meat in the container each day.

It is important that the temperature of the refrigerator is kept at a constant 38F. Temperatures lower than 36F will cause the curing action to stop. Temperatures above 40F will cause the meat to spoil.

Preparation for Smoking

Rinse the pork bellies with fresh water, and dry thoroughly with paper towels. Before you smoke the bellies, you must further dry them so that a pellicle forms on the outside of the meat. A pellicle forms as a result of the cure pulling water soluble proteins up to the surface of the meat. When these proteins dry, they form a shiny, sticky coating over the meat, which will absorb the smoke much better. The meat will not take smoke until the

surface is dry. If the meat is smoked when still damp, it will be smudgy, not rich in color and not taste as good.

To achieve this, elevate the meat on cooling racks and set up a household fan to blow over it and help speed up the drying process. Turn the meat over halfway through the drying process. The length of time it takes to dry depends on the meat, the relative humidity and the speed of the fan. As a guideline about 30 minutes on each side should do it. You should notice the meat take on a surface sheen which is an indication that the pellicle has formed.

Source of Wood for Smoke

Use only hardwood sawdust or chips for smoking. Resinous evergreen wood will impart an undesirable flavor. Here are a few wood options that we like:

Wood	Characteristics
Apple	Slightly sweet, fruity smoke that is mild , but capable of flavoring bacon
Cherry	Slightly sweet, fruity smoke that is mild , but capable of flavoring bacon
Hickory	Strong hearty taste
Oak	Strong, earthy smoke for a robust bacon
Maple	Sweet smoke – good for bacon you will eat with pancakes

Smoking

Hang the pork bellies on bacon hangers in the smoker. Bacon hangers can also be purchased from 'The Sausagemaker' (www.sausagemaker.com). Alternatively you can make your own, using a piece of non-resinous wood material about 2-inches wide, 1/2-inch thick, and 12-inches long. Space four or five No. 6 galvanized nails along the board. Make a hanger from No. 9 galvanized wire and fasten the one end to the middle of the piece of wood.

We like to cold-smoke the meat at a low temperature over a long period of time. This ensures that you get the maximum smoke penetration and gives you a rich color on the meat. Try to keep the temperature of the smoker between 80F and 100F. When you start going above this the surface of the meat will start to seal and the smoke will no longer penetrate the meat. Smoke the meat for about 8 hours, or until you are happy with the color.

Hanging Smoking

Handling the Finished Product

Remove the rind if it was not already removed when you got the meat. This is made easier if you allow the bacon to sit in the refrigerator overnight and firm up.

Slice the bacon to your desired thickness. We use an electric meat slicer to yield uniform pieces, but if you have a lot of time and patience on your hands you can do this manually. This is made easier by slightly freezing the bacon first.

Bacon cured and smoked in this fashion is perishable and needs to be frozen or stored in a refrigerator until eaten.

Loose slices of uncooked bacon should be vacuum-packed or wrapped very tightly in cling film so that no air can get in. Do not use greaseproof paper, as the bacon will dry out. Loose bacon can be stored in the refrigerator for up to eight days and in the freezer for 3 months. If you plan on freezing the bacon, it will keep it's fresh flavor a lot longer if it is not sliced.

Smoked Slabs Slicing